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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,874	08/04/2003	Brian G. Johnson	ITO.0047US (P16202)	5272

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EXAMINER

DICKEY, THOMAS L

ART UNIT	PAPER NUMBER
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2826

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/633,874

Applicant(s)

JOHNSON, BRIAN G.

Examiner

Thomas L. Dickey

Art Unit

2826

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 04 May 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: 2, 7 and 11.  
Claim(s) rejected: 1, 3-6 and 10.  
Claim(s) withdrawn from consideration: 12-16, 18-24 and 26.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

Thomas L. Dickey

Patent Examiner

AU 2826

Continuation of 3. NOTE: amendments are made solely to withdrawn claims and thus can have no effect on issues for appeal.

Continuation of 11. does NOT place the application in condition for allowance because: Applicant argues, "The Lowrey patent [sic] relates to a conventional vertical phase change memory." However, Applicant cites no evidence in the Lowrey patent application publication to prove this essentially factual assertion. The examiner's examination of the Lowrey patent application publication finds to the contrary, that in fact Lowrey and his co-inventors present their device as a uniquely designed solid state, electrically operated memory element having a new structural relationship between the electrical contacts and the memory material which are integral parts of said memory element. Note paragraph 0002 of Lowrey et al. 2004/0245603.

Applicant argues, "The phase change material is positioned between a heater 130 and an upper electrode." However, Applicant cites no evidence in the Lowrey patent application publication to prove this essentially factual assertion. The examiner's examination of the Lowrey patent application publication finds to the contrary, that in fact elements 130A-B are not described as heaters but rather as first contacts (i.e. electrodes) that supply an electrical signal to the memory material. Note paragraph 0033 of Lowrey et al. 2004/0245603. Further, Lowrey et al. specifically state that memory layer 250 should be adjacent to the edges of contacts 130A-B. Note paragraph 0036 of Lowrey et al. 2004/0245603.

Applicant argues, "In Lowrey, the phase change material is not formed between the horizontally spaced electrodes, it is formed on top of them so that the electrodes can act as heaters." Again, Applicant cites no evidence in the Lowrey patent application publication to prove this essentially factual assertion. In paragraph 0078 Lowrey et al. explain that in an alternate (but not in every embodiment) embodiment of their invention, electrodes 130A-B may be modified by narrowing their width (i.e. their dimension parallel to the channel width) adjacent to memory material 250. This is shown in figure 6. Note that figure 6 shows a cross-section (parallel to the channel width) at right angles to the cross-section shown in figure 2. Note further that the feature (the "narrowing" indicated as part #188) shown in figure 6 is OPTIONAL and NEED NOT BE PRESENT in every embodiment of the Lowrey et al. device. Finally note that the throat 188 of electrode 130A or 130B only heats up in response to current passing through throat 188 into memory material 250. It seems clear enough that in the figure 6 embodiment, as well as the other embodiments, the primary purpose of electrodes 130A and 130B is to deliver current to memory material 250 and then take it away again. Since current may pass through memory material 250 from the first electrode to the other, it seems clear that memory material 250 is "between" the two electrodes.

Applicant is asked to please keep in mind that claim 10, if amended to replace the improper reference to cancelled claim 9 with the subject matter of claim 1, would be considered allowable.